

IN THE CLAIMS

Please cancel claims 46-93 without prejudice.

Please amend the claims as follows:

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1. (Amended) A needle protective device comprising:  
a needle guard slidably mounted on a needle having a sharpened distal end, said needle guard having a proximal end and a distal end, said needle guard containing a non-metal movable needle trap that is biased toward said needle, said needle trap  
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entrapping said sharpened distal end of said needle when said distal end of said needle guard moves near said sharpened distal end of said needle[; and].

[limiting means for limiting the forward movement of said needle guard along said needle.]

26. (Amended) The [assembly] device of claim 7 wherein said needle guard comprises a first notch for retaining said distal end of said resilient member.

27. (Amended) The [assembly] device of claim 26 wherein said needle trap comprises a lead-in section having a second notch, said lead-in section locating said resilient member within first and second notches, said second notch releasably retaining said distal end of said resilient member.

28. (Amended) The [assembly] device of claim 26 wherein said needle trap comprises a lead-in section having a multilevel landing, said lead-in section locating said resilient member within said first notch and said landing, said landing releasably retaining said distal end of said resilient member.

29. (Amended) The [assembly] device of claim 7 wherein said needle trap comprises at least one longitudinal channel for reducing the contact surface area between said needle trap and said resilient member.

30. (Amended) The [assembly] device of claim 8 [wherein said limiting means comprises] further comprising a tether having a first end and a second end, said first end attached to said housing, said second end attached to said needle guard.

31. (Amended) The [assembly] device of claim 21 [wherein said limiting means comprises] further comprising a tether having a first end and a second end, said first end attached to said hub, said second end attached to said needle guard.

32. (Amended) The [assembly] device of claim 30 or 31 wherein said tether is flexible.

33. (Amended) The [assembly] device of claim 8 [wherein said limiting means comprises] further comprising a rigid tether and said housing includes an aperture for receiving said rigid tether, said rigid tether having a first end and a second end, said first end having a stop to prevent said first end of said rigid tether from advancing through said housing aperture, said second end attached to said needle guard.

34. (Amended) The [assembly] device of claim 21 [wherein said limiting means comprises] further comprising a rigid tether and said hub includes an aperture for receiving said rigid tether, said rigid tether having a first end and a second end, said first end having a stop to prevent said first end of said rigid tether from

advancing through said hub aperture, said second end attached to said needle guard.

35. (Amended) The [assembly] device of claim 32 wherein said hub includes a pocket for storing said flexible tether.

36. (Amended) The [assembly] device of claim 1 wherein said needle includes a change in contour near the sharpened distal end of said needle, said change in contour providing [said] limiting means to limit the forward movement of said needle guard along said needle.

37. (Amended) The [assembly] device of claim 8 wherein said housing comprises at least one projection for removably attaching a protective storage cover to said housing.

38. (Amended) The [assembly] device of claim 21 wherein said hub comprises at least one projection for removably attaching a protective storage cover to said hub.

39. (Amended) The [assembly] device of claim 1 wherein said needle guard is side-loadable onto said needle.

40. (Amended) The [assembly] device of claim 1 wherein said needle guard comprises a first section and a second section, said first and second sections having attachable mating faces.

41. (Amended) The [assembly] device of claim 40 wherein said needle guard comprises an integral configuration whereby said first and second sections are joined by a hinge section.

42. (Amended) The [assembly] device of claim 39 wherein said needle guard includes a longitudinal recess for receiving said needle.

43. (Amended) The [assembly] device of claim 7 further comprising a shroud for containing said resilient member and said needle guard.

44. (Amended) The [assembly] device of claim [46] 43 wherein said shroud comprises a collapsible bellows.

45. (Amended) The [assembly] device of claim 7 further comprising a shroud for containing said needle guard and said needle when the sharpened distal end of said needle is contained within said needle guard, said shroud comprising a bellows, said bellows providing [the] limiting means to limit the forward movement of said needle guard along said needle.

Please add the following new claims:

94. (New) The device of claim 1 wherein said needle guard comprises a first section and a second section, said first and second sections being attachable over said needle.

95. (New) The device of claim 94 wherein said needle guard comprises an integral configuration whereby said first and second sections are joined by a hinge section.

96. (New) A needle protective device comprising:  
a needle guard slidably mounted on a needle having a sharpened distal end, said needle guard having a proximal end and a distal end, said needle guard containing a movable needle trap integral to said needle guard that is biased toward said needle, said needle trap entrapping said sharpened distal end of said needle when said distal end of said needle guard moves near said sharpened distal end of said needle.

97. (New) The device of claim 96 wherein said needle trap is inherently biased toward said needle.

98. (New) The device of claim 96 further comprising biasing means for urging said needle guard forward toward said sharpened distal end of said needle.

99. (New) The device of claim 98 further comprising retaining means for releasably retaining said needle guard near the base of said needle.

100. (New) The device of claim 99 further comprising triggering means for releasing said retaining means.

101. (New) The device of claim 98 wherein said biasing means comprises a resilient member having a proximal end and a distal end.

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102. (New) The device of claim <sup>101</sup>98 wherein <sup>a</sup>the base of said needle is coupled to a housing having a forward end, said needle extending axially from said forward end of said housing.

103. (New) The device of claim 102 wherein said resilient member is disposed between said housing and said needle guard.

104. (New) The device of claim 103 wherein said resilient member comprises a coil spring.

Sub B4 105. (New) The device of claim 99 wherein said retaining means comprises a latching arm having a proximal end and a distal end, said proximal end of said latching arm hingedly attached to said housing, said distal end of said latching arm comprising a protrusion.

106. (New) The device of claim 105 wherein said needle guard includes a recess for receiving said protrusion.

107. (New) The device of claim 105 wherein said latching arm further comprises a finger pad for manually disengaging said latching arm from said needle guard.

108. (New) The device of claim 105 wherein said latching arm comprises a ramp for biasing said latching arm in an outward manner when a compressive force is applied to said needle guard.

109. (New) The device of claim 103 wherein said forward end of said housing comprises an opening, the base of said needle being secured within said opening.

110. (New) The device of claim 109 wherein said housing comprises a longitudinal wall section extending forward from said housing, said wall section substantially surrounding said opening.

111. (New) The device of claim 110 wherein said wall section comprises at least one aperture for providing access to said opening.

112. (New) The device of claim 110 wherein said retaining means comprises a latching arm having a proximal end and a distal end, said proximal end of said latching arm hingedly attached to said wall section of said hub, said distal end of said latching arm comprising a protrusion, said needle guard including a recess for receiving said protrusion.

113. (New) The device of claim 112 wherein said triggering means comprises a finger pad positioned on said latching arm for manually disengaging said latching arm from said needle guard.

114. (New) The device of claim 112 wherein said triggering means comprises a ramp positioned on said latching arm for biasing said latching arm in an outward manner when a rearward force is applied to said needle guard.

115. (New) The device of claim 102 further comprising a needle guard hub coupled to said housing, said hub having a longitudinal wall section extending

forward from said hub, said resilient member disposed between said hub and said needle guard.

116. (New) The device of claim 115 wherein said wall section comprises an aperture for accessing said needle.

117. (New) The device of claim 115 wherein said retaining means comprises a latching arm having a proximal end and a distal end, said proximal end of said latching arm hinged to said wall section of said hub, said distal end of said latching arm comprising a protrusion, said needle guard having a recess for receiving said protrusion.

118. (New) The device of claim 117 wherein said triggering means comprises a finger pad on said latching arm for manually disengaging said latching arm from said needle guard.

119. (New) The device of claim 117 wherein said triggering means comprises a ramp for biasing said latching arm in an outward manner when a rearward force is applied to said needle guard.

120. (New) The device of claim 101 wherein said needle guard comprises a first notch for retaining said distal end of said resilient member.

121. (New) The device of claim 120 wherein said needle trap comprises a lead-in section having a second notch, said lead-in section locating said resilient member within first and second notches, said second notch releasably retaining said distal end of said resilient member.



122. (New) The device of claim 120 wherein said needle trap comprises a lead-in section having a multilevel landing, said lead-in section locating said resilient member within said first notch and said landing, said landing releasably retaining said distal end of said resilient member.

123. (New) The device of claim 101 wherein said needle trap comprises at least one longitudinal channel for reducing the contact surface area between said needle trap and said resilient member.

124. (New) The device of claim 102 further comprising a tether having a first end and a second end, said first end attached to said housing, said second end attached to said needle guard.

125. (New) The device of claim 115 further comprising a tether having a first end and a second end, said first end attached to said hub, said second end attached to said needle guard.

126. (New) The device of claim 124 or 125 wherein said tether is flexible.

127. (New) The device of claim 102 further comprising a rigid tether and said housing including an aperture for receiving said rigid tether, said rigid tether having a first end and a second end, said first end having a stop to prevent said first end of said rigid tether from advancing through said housing aperture, said second end attached to said needle guard.

128. (New) The device of claim 115 further comprising a rigid tether and said hub includes an aperture for receiving said rigid tether, said rigid tether having a first end and a second end, said first end having a stop to prevent said first end of said rigid tether from advancing through said hub aperture, said second end attached to said needle guard.

129. (New) The device of claim 126 wherein said hub includes a pocket for storing said flexible tether.

130. (New) The device of claim 96 wherein said needle includes a change in contour near the sharpened distal end of said needle, said change in contour providing limiting means to limit the forward movement of said needle guard along said needle.

131. (New) The device of claim 102 wherein said housing comprises at least one projection for removably attaching a protective storage cover to said housing.

132. (New) The device of claim 115 wherein said hub comprises at least one projection for removably attaching a protective storage cover to said hub.

133. (New) The device of claim 96 wherein said needle guard is side-loadable onto said needle.

134. (New) The device of claim 96 wherein said needle guard comprises a first section and a second section, said first and second sections being attachable over said needle.

135. (New) The device of claim 134 wherein said needle guard comprises an integral configuration whereby said first and second sections are joined by a hinge section.

136. (New) The device of claim 133 wherein said needle guard includes a longitudinal recess for receiving said needle.

137. (New) The device of claim 101 further comprising a shroud for containing said resilient member and said needle guard.

138. (New) The device of claim 101 further comprising a shroud for containing said needle guard and said needle when the sharpened distal end of said needle is contained within said needle guard, said shroud comprising a bellows, said bellows providing limiting means to limit the forward movement of said needle guard along said needle.

139. (New) A needle protective device comprising:  
a needle guard slidably mounted on a needle having a sharpened distal end, said needle guard having a first section, a second section, a proximal end and a distal end, said first and second sections being attachable over said needle, said needle guard containing a movable needle trap that is biased toward said needle, said needle trap entrapping said sharpened distal end of said needle when said distal end of said needle guard moves near said sharpened distal end of said needle.

140. (New) The device of claim 139 wherein said needle trap is integral to said needle guard.

141. (New) The device of claim 139 wherein said needle trap is inherently biased toward said needle.

142. (New) The device of claim 139 further comprising biasing means for urging said needle guard forward toward said sharpened distal end of said needle.

143. (New) The device of claim 142 further comprising retaining means for releasably retaining said needle guard near <sup>a</sup>the base of said needle.

144. (New) The device of claim 143 further comprising triggering means for releasing said retaining means.

145. (New) The device of claim 142 wherein said biasing means comprises a resilient member having a proximal end and a distal end.

146. (New) The device of claim <sup>145</sup>142 wherein <sup>a</sup>the base of said needle is coupled to a housing having a forward end, said needle extending axially from said forward end of said housing.

147. (New) The device of claim 146 wherein said resilient member is disposed between said housing and said needle guard.

148. (New) The device of claim 147 wherein said resilient member comprises a coil spring.

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149. (New) The device of claim 143 wherein said retaining means comprises a latching arm having a proximal end and a distal end, said proximal end of said latching arm hingedly attached to said housing, said distal end of said latching arm comprising a protrusion.

150. (New) The device of claim 149 wherein said needle guard includes a recess for receiving said protrusion.

151. (New) The device of claim 149 wherein said latching arm further comprises a finger pad for manually disengaging said latching arm from said needle guard.

152. (New) The device of claim 149 wherein said latching arm comprises a ramp for biasing said latching arm in an outward manner when a compressive force is applied to said needle guard.

153. (New) The device of claim 147 wherein said forward end of said housing comprises an opening, the base of said needle being secured within said opening.

154. (New) The device of claim 153 wherein said housing comprises a longitudinal wall section extending forward from said housing, said wall section substantially surrounding said opening.

155. (New) The device of claim 154 wherein said wall section comprises at least one aperture for providing access to said opening.

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156. (New) The device of claim 154 wherein said retaining means comprises a latching arm having a proximal end and a distal end, said proximal end of said latching arm hingedly attached to said wall section of said hub, said distal end of said latching arm comprising a protrusion, said needle guard including a recess for receiving said protrusion.

157. (New) The device of claim 156 wherein said triggering means comprises a finger pad positioned on said latching arm for manually disengaging said latching arm from said needle guard.

158. (New) The device of claim 156 wherein said triggering means comprises a ramp positioned on said latching arm for biasing said latching arm in an outward manner when a rearward force is applied to said needle guard.

159. (New) The device of claim 146 further comprising a needle guard hub coupled to said housing, said hub having a longitudinal wall section extending forward from said hub, said resilient member disposed between said hub and said needle guard.

160. (New) The device of claim 159 wherein said wall section comprises an aperture for accessing said needle.

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161. (New) The device of claim 159 wherein said retaining means comprises a latching arm having a proximal end and a distal end, said proximal end of said latching arm hingedly attached to said wall section of said hub, said distal end of said latching arm comprising a protrusion, said needle guard having a recess for receiving said protrusion..

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162. (New) The device of claim 161 wherein said triggering means comprises a finger pad on said latching arm for manually disengaging said latching arm from said needle guard.

163. (New) The device of claim 161 wherein said triggering means comprises a ramp for biasing said latching arm in an outward manner when a rearward force is applied to said needle guard.

164. (New) The device of claim 145 wherein said needle guard comprises a first notch for retaining said distal end of said resilient member.

165. (New) The device of claim 164 wherein said needle trap comprises a lead-in section having a second notch, said lead-in section locating said resilient member within first and second notches, said second notch releasably retaining said distal end of said resilient member.

166. (New) The device of claim 164 wherein said needle trap comprises a lead-in section having a multilevel landing, said lead-in section locating said resilient member within said first notch and said landing, said landing releasably retaining said distal end of said resilient member.

167. (New) The device of claim 145 wherein said needle trap comprises at least one longitudinal channel for reducing the contact surface area between said needle trap and said resilient member.

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168. (New) The device of claim 146 further comprising a tether having a first end and a second end, said first end attached to said housing, said second end attached to said needle guard.

169. (New) The device of claim 159 further comprising a tether having a first end and a second end, said first end attached to said hub, said second end attached to said needle guard.

170. (New) The device of claim 168 or 169 wherein said tether is flexible.

171. (New) The device of claim 146 further comprising a rigid tether and said housing includes an aperture for receiving said rigid tether, said rigid tether having a first end and a second end, said first end having a stop to prevent said first end of said rigid tether from advancing through said housing aperture, said second end attached to said needle guard.

172. (New) The device of claim 159 further comprising a rigid tether and said hub includes an aperture for receiving said rigid tether, said rigid tether having a first end and a second end, said first end having a stop to prevent said first end of said rigid tether from advancing through said hub aperture, said second end attached to said needle guard.

173. (New) The device of claim 170 wherein said hub includes a pocket for storing said flexible tether.

174. (New) The device of claim 139 wherein said needle includes a change in contour near the sharpened distal end of said needle, said change in contour



providing limiting means to limit the forward movement of said needle guard along said needle.

175. (New) The device of claim 146 wherein said housing comprises at least one projection for removably attaching a protective storage cover to said housing.

176. (New) The device of claim 159 wherein said hub comprises at least one projection for removably attaching a protective storage cover to said hub.

177. (New) The device of claim 139 wherein said needle guard comprises an integral configuration whereby said first and second sections are joined by a hinge section.

178. (New) The device of claim 145 further comprising a shroud for containing said resilient member and said needle guard.

179. (New) The device of claim 145 further comprising a shroud for containing said needle guard and said needle when the sharpened distal end of said needle is contained within said needle guard, said shroud comprising a bellows, said bellows providing limiting means to limit the forward movement of said needle guard along said needle.

180. (New) The device of claim 1 wherein said needle trap is made of a plastic material.

Remarks